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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER VU, HOANG-CHUONG Q				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,437

Applicant(s)

KUBLER ET AL.

Examiner

HOANG-CHUONG Q. VU

Art Unit

2476

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-40 and 42-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-40, and 42-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims: Claims 22-40, 42-69 are currently pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/05/2010 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 22-25, 27, 29-34, 37-40, 43, 45-52, 54-60-63, 65, and 68-69** are rejected under 35 U.S.C. 102(e) as being anticipated by Iwami et al. (5,604,737).

Regarding claim 22, Iwami et al. disclose a communication system controller comprising: interface circuitry for communicating, with an information transmission device, information requesting setup of a call (**see col. 11 lines 4-9**) and parameters for configuring the information transmission device (**see col. 17 lines 20-25; parameters**

are set to messages to specify an communication address; based on this address, the server determines the communication terminal and process voice in protocol in which the terminal connected); wherein the parameters for configuring the information transmission device comprise information specifically related to the conversion, by the information transmission device, of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information **(see col. 3 lines 23-52; a parameter an extension number is for specifying a communication terminal; based on the terminal address, communication control is performed to connect the telephone with the communication terminal; voice information is converted into packets for transmitting to the communication terminal and vice versa);** and operational software executable by the at least one processor, the operational software causing the at least one processor to produce the parameters for configuring the information transmission device based upon the information requesting setup of a call **(see col. 17 lines 21-26; information generated with extension number (parameter) to be transmitted to the server),** the information transmission device thereby communicatively coupling one of a plurality of communication networks to another of the plurality of communication networks **(see col. 17 lines 31-35; extension number is fetched from parameters for processing) (col. 3 lines 36-45; communication control is performed to connect the telephone to the communication terminal via the server; thus coupling public network with LAN (Fig.1)).**

Regarding claims 23-25, 48, 50-51, and 61-63, Iwami et al. further teach wherein the plurality of communication networks comprises a packet network (**col. 1 lines 24-25**); wherein the packet network communicates using an Internet protocol (IP) which comprises transmission control protocol (TCP)/Internet protocol (IP) (**col. 17 lines 46-47**).

Regarding claim 27, Iwami et al. further teach wherein the plurality of communication networks comprises a conventional telephone switching network (**col. 1 lines 58-59**).

Regarding claims 29-30, and 56, Iwami et al. further teach a packet network interface for communicating using a packet protocol (Fig. 2, LAN controller interfaces with LAN, and LAN is a packet network) wherein the packet protocol is compliant with an Ethernet protocol (**col. 1 lines 24-28**).

Regarding claims 31 and 49, Iwami et al. further disclose packets communicated comprise digitized voice information (**col. 3 line 50**).

Regarding claims 32 and 33, Iwami et al. further teach wherein the packets communicated via the packet network interface comprise non-voice data; wherein at least a portion of the non-voice data is unrelated to the communication of digitized voice information (**col. 2 lines 4-6**).

Regarding claim 34, Iwami et al. further teach wherein the operational software is capable of determining a routing for the requested call (**col. 2 lines 52-65**; **communication terminal address is determined from a communication setup request**).

Regarding claims 37 and 38, lwami et al. further teach wherein the information requesting setup of a call comprises information related to telephony signals received by the information transmission device; wherein the telephony signals received comprise at least one of dual tone multi-frequency (DTMF) signals, dial tone, a ring signal, on-hook, off hook, and call progress tones (**col. 13 lines 31-41**).

Regarding claims 39 and 40, lwami et al. further teach wherein the parameters for configuring the information transmission device comprise information related to telephony signals generated by the information transmission device (**col. 13 lines 37-38**); wherein the telephony signals generated by the information transmission device comprise at least one of dual tone multi-frequency (DTMF) signals, dial tone, a busy signal, and a ringing signal (**col. 15 lines 11-22**).

Regarding claim 43, lwami et al. further teach wherein the parameters for configuring the information transmission device comprise information related to at least one of a battery supply, over-voltage protection, ringing current, tone generation, tone detection, two wire to four wire conversion, and test functionality (**see col. 15 lines 14-16**).

Regarding claim 45, lwami et al. further teach wherein the interface circuitry is capable of communicating digitized voice information with the information transmission device (**see col. 3 line 50**).

Regarding claim 46, lwami et al. further teach wherein the communication system controller and the information transmission device are located within the same housing (**see Fig. 6, controllers located in the server 20**).

Regarding claim 47, Iwami et al. disclose a communication system controller comprising: interface circuitry arranged to deliver configuration information to a system for communicatively coupling of one of a plurality of communication networks to another of the plurality of communication networks based upon the configuration information (see col. 17 lines 31-35; extension number is fetched from parameters for processing) (col. 3 lines 36-45; communication control is performed to connect the telephone to the communication terminal via the server; thus coupling public network with LAN (Fig.1)); wherein the configuration information comprise information specifically related to the conversion, by the system, of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information (see col. 3 lines 23-52; a parameter an extension number is for specifying a communication terminal; based on the terminal address, communication control is performed to connect the telephone with the communication terminal; voice information is converted into packets for transmitting to the communication terminal and vice versa); storage capable of containing operational software and call routing information; and at least one processor operably coupled to the interface circuitry, the at least one processor capable of accessing the operational software and call routing information (see col. 3 lines 11-22, communication terminal address is for routing), the operational software functioning at least to cause the at least one processor to produce the configuration information based upon call setup information and the call routing information (see col. 17 lines 21-26; information generated with extension number (parameter) to be transmitted to the server).

Regarding claim 52, Iwami et al. further teach wherein the plurality of communication networks comprises a conventional telephone switching network (**col. 1 lines 58-59**).

Regarding claim 54, Iwami et al. further teach wherein the call setup information is received via one of the plurality of communication networks (**see Fig. 1; call setup may be received from network 1 or 3**).

Regarding claim 55, Iwami et al. further teach a network interface adapted to communicate using a wired network (**col. 1 lines 58-59**).

Regarding claim 57, Iwami et al. further teach wherein the call setup information is received via the wired network (**see Fig. 1; call setup may be received from network 3 (line switching network)**).

Regarding claim 58, Iwami et al. further teach wherein the call setup information comprises a destination address (**see col. 14 lines 41-44**).

Regarding claim 59, Iwami et al. further teach wherein the call routing information comprises at least one association of a destination address and a call route (**see col. 3 lines 23-26; extension number is associated with a communication terminal and the communication terminal address**).

Regarding claim 60, Baum et al. disclose a machine-readable storage having stored thereon a computer program having a plurality of code sections for implementing a communication system controller for controlling an information transmission device for communicatively coupling one of a plurality of communication networks to a second of the plurality of communication networks (**see col. 17 lines 31-35; extension number is**

fetches from parameters for processing) (col. 3 lines 36-45; communication control is performed to connect the telephone to the communication terminal via the server; thus coupling public network with LAN (Fig.1)), the code sections executable by a machine for causing the machine to perform the operations comprising: storing routing information received from a user at a first location (); accepting a call setup request via the one of the plurality of communication networks ((see Fig. 1; call setup may be received from network 1 or 3), the call setup request comprising a destination address corresponding to a second location (see col. 14 lines 41-44); determining a call route between the first location and second location based upon the call setup request and the stored routing information ((see col. 3 lines 23-26; the server determines the communication terminal address for routing the call, the call request is associated with a communication terminal and the communication terminal address); generating configuration information using at least one of the call setup request and the stored routing information (see col. 17 lines 21-26; information generated with extension number (parameter) to be transmitted); wherein the configuration information comprise information specifically related to the conversion, by the information transmission device, of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information (see col. 3 lines 23-52; a parameter an extension number is for specifying a communication terminal; based on the terminal address, communication control is performed to connect the telephone with the communication terminal; voice information is converted into packets for transmitting to the communication terminal and vice versa); and

providing the configuration information to the information transmission device to cause communicative coupling of the one of a plurality of communication networks to the second location via another of the plurality of communication networks in order to establish the requested call **(see col. 17 lines 31-35; extension number is fetched from parameters for processing) (col. 3 lines 36-45; communication control is performed to connect the telephone to the communication terminal via the server; thus coupling public network with LAN (Fig.1)).**

Regarding claim 65, Iwami et al. further teach wherein the plurality of communication networks comprises a conventional telephone switching network **(col. 1 lines 58-59).**

Regarding claims 68 and 69, Baum et al. further teach sending to the second location a call setup request and receiving from the second location acceptance of a call setup request **(see Fig. 9).**

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. **Claims 26, 64** are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwami et al. (5,604,737) in view of Lev et al. (5,729,544).

Regarding claims 26 and 64, Iwami et al. disclose all the subject matter of the claimed invention as recited in claims 23 and 61 above respectively without explicitly teach wherein the packet network comprises a wireless network. However, Lev et al. from the same or similar field of endeavor teach wherein the packet network comprises a wireless network (**see col. 2 lines 62-63**). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the wireless network as taught by Lev et al. in the teaching of Iwami et al. to provide addition coverage to wireless customers. The motivation or suggestion would have been to extend the use of applications to remote locations not serviced by LAN/WANs.

7. **Claims 28, 53, 66** are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwami et al. (5,604,737).

Regarding claims 28, 53 and 66, Iwami et al. disclose the conventional telephone switching network without explicitly reciting communicating using analog signals. The examiner takes official notice that it is well-known in the art to utilize analog signals in conventional communication network. Thus it would have been obvious to one of ordinary skill to implement the analog signals in the line switching network as taught by Iwami et al. The motivation would have been to provide the telephones within the line network to communicate a voice session.

8. **Claim 35** is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwami et al. (5,604,737) in view of Barak (5,764,741).

Regarding claim 35, Iwami et al. disclose all the subject matter of the claimed invention as recited in claim 34 above without explicitly teach wherein the routing is determined based upon a cost of use of a communication network. However, Barak from the same or similar field of endeavor teaches wherein the routing is determined based upon a cost of use of a communication network (**see Abstract lines 2-8; determining routing based on the cost information in the routing database**). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use routing cost in a routing database taught by Barak to determine which providers or networks to execute the call. One of ordinary skill in the art would have motivated to do so to select a least cost route for a call.

9. **Claim 36** is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwami et al. (5,604,737) in view of Fleischer, III et al. (5,592,541).

Regarding claim 36, Iwami et al. disclose all the subject matter of the claimed invention as recited in claim 34 above without explicitly suggest wherein the routing is based upon predefined call routing information. However, Fleischer, III et al. from the same or similar field of endeavor teach wherein the routing is based upon predefined call routing information (**see col. 1 lines 9-12; routing call based on predetermined routing options**). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the predetermined routing options as taught by Fleischer III, et al. in the teaching of Iwami et al. to forward calls based on the

individual needs. One of ordinary skill would have motivated to do so to allow subscribers to define and tailor their telecommunication services (see Fleischer III et al. col. 1 lines 6-8).

10. **Claim 42** is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwami et al. (5,604,737) in view of Sharman (5,774,854).

Regarding claim 42, Iwami et al. disclose all the subject matter of the claimed invention as recited in claim 22 above without explicitly suggest the parameters for configuring the information transmission device comprise information related to the buffering of digitized voice information for a predefined period of time to minimize gaps in an analog voice signal. However, Sharman from the same or similar field of endeavor teaches a text to speech system operating in real using an acoustic processor and a linguistic processor. Due to the computational time the linguistic processor requires to process data, future requests from the acoustic processor cannot be made. Thus gaps in the speech output often occur when the acoustic processor requests data from the linguistic processor. Sharman proposes a solution to overcome the gaps in data by adjusting the buffer for minimal of output data so that future requests can be supplied in a timely manner (**column 7, lines 39-48**). Hence the propagation delay caused by the linguistic processor is a factor affecting the adjustment in the buffer for desired optimal output. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Iwami et al. to have the parameters configuring information related to the buffering of digitized voice information for a predefined period of time in order to minimize gaps in the analog voice signal as

taught by Sharman. One is motivated as such to accurately halt the system based on the output in the event that an interruption occurs (abstract, column 2, lines 34-39).

11. **Claim 44** is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwami et al. (5,604,737) in view of Baum et al. (5,761,281).

Regarding claim 44, Iwami et al. disclose all the subject matter of the claimed invention as recited in claim 22 above without explicitly teach reducing the quantity of digitized voice information communicated via the information transmission device, by changing the packetization of digitized voice information when voice activity on one of the plurality of communication networks falls below a predetermined level. However, Henley et al from the same or similar field of endeavor teach a system and method for communication of audio data over a packet-based network. It is disclosed the system further comprises a decimation circuit for deleting audio data from a designated location of the buffer to shorten the portions of the stream of audio data in the buffer. The circuit addresses the problem when data are read from the buffer slower than they are written to the buffer (**column 5, lines 65-67 and column 6, lines 1-5**). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Iwami et al. to reduce the quantity of digitized voice information communicated via the information transmission device by changing the packetization of digitized voice when voice activity on one of the plurality of communication networks falls below a predetermined level. One is motivated as such to ensure the buffer stays close to its predetermined length for efficient realignment of the audio data in the buffer (**column 6, lines 11-14**).

12. **Claim 67** is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwami et al. (5,604,737) in view of Baum et al. (5,761,281).

Regarding claim 67, Iwami et al. further teach determining whether routing information corresponding to the destination address is available using the stored routing information and the destination address (col. 3 lines 11-20). However, Iwami et al. may not explicitly suggest prompting the user for routing information, if routing information corresponding to the destination address is not available; and refraining from prompting the user, if routing information corresponding to the destination address is available. Baum et al. from the same or similar field of endeavor teach wherein the determining comprises: determining whether routing information corresponding to the destination address is available using the stored routing information and the destination address **(col. 21 lines 48-51; determining to route calls placed to a particular phone number associated with computers C3-C5)**; prompting the user for routing information, if routing information corresponding to the destination address is not available **(col. 21 lines 54-60; computer C1 provides call setup information)**; and refraining from prompting the user, if routing information corresponding to the destination address is available **(col. 21 lines 58-63; modem converts the signals when computer C5 is available)**. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Baum et al. to prompt the user to enter information for routing the call if the destination address is not available and not inform the user if the information is available for making the call in the teaching of Iwami et al. One of ordinary skill in the art would have motivated to do so to

reduce wasteful resource when notifying the user is unnecessary because the information is available.

Response to Remarks/Arguments

13. Applicant's remarks/arguments with respect to claims 22, 47, and 60 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOANG-CHUONG Q. VU whose telephone number is (571) 270-3945. The examiner can normally be reached on Monday through Thursday 8:30 AM to 6:00 PM EST. and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AYAZ R. SHEIKH can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art
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/H. V./ 07/02/2010
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